

REMARKS / ARGUMENTS

Claims 22-43 remain pending in this application. No claims have been canceled or added.

Interview

Applicants wish to thank the Examiner for conducting a telephone interview with the undersigned on August 2, 2007. As agreed during the interview, formal remarks are being submitted for the Examiner's further consideration. The remarks below include the substance of that which was discussed during the interview.

35 U.S.C. §103

Claims 22-23, 28-34 and 39-43 stand rejected under 35 U.S.C. §103(a) as being unpatentable over DeKoning et al (U.S. Patent No. 5,790,773) in view of Sicola et al (U.S. Patent No. 6,643,795). These rejections are traversed as follows.

As discussed during the interview, the cited references fail to disclose the features of the presently claimed invention as set forth in independent claims 22 and 33. These claims recite a storage system having a plurality of disks including first disks configuring a RAID group and at least one second disk. Each of the first disks stores one of data received from a computer coupled to the storage system or parity data used for recovering the data received from the computer. A control section is

configured to hold an error status of each of the first disks and to start to mirror data between one of the first disks and the at least one said second disk when the error status of the one of the first disks matches a predetermined first criterion. After starting to mirror data between the one of the first disks and the at least one second disk, the control section is configured to stop mirroring data between the one of the first disks and the at least one second disk and start mirroring data between another one of the first disks and the at least one second disk, according to the error status of the one of the first disks and the another one of the first disks.

The cited references fail to disclose or suggest the above-mentioned features of claims 22 and 33. As mentioned in the Response filed on February 9, 2007, DeKoning et al disclose generating a snapshot copy of data in a RAID storage subsystem in response to a snapshot request from a host computer (see Figs. 2 and 3). DeKoning et al are silent with respect to mirroring data between disks based upon an error status of a disk. As such, DeKoning et al do not disclose or suggest dynamically mirroring data based upon an error status of a disk.

The deficiencies in DeKoning et al are not overcome by resort to Sicola et al. Sicola et al disclose the detection of device failures, such as controller and link failures, by "heartbeat" monitoring by each array controller (see column 4, lines 44-53). If a failure of a link occurs, that array controller is set to automatically "failover", to its partner controller (see column 4, lines 54-59). However, Sicola et al do not disclose or suggest the starting and stopping of mirroring of data between disks

based upon an error status of a disk. As such, Sicola et al, just as with DeKoning et al, fail to disclose or suggest the dynamic mirroring of data based upon the error status of a disk.


Therefore, it is submitted that the pending claims patentably define the present invention over the cited art. The Examiner is hereby invited to contact the undersigned by telephone with any questions in order to expedite prosecution of this application.

Conclusion

In view of the foregoing, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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